The Scientific Statistical Committee met April 9-10, 2001 at the Hilton Anchorage. All members were present except Richard Marasco, Steve Berkeley, Steve Hare, Mark Herrmann:

Jack Tagart, Vice Chair    Keith Criddle,    Doug Eggers
Jeff Hartmann             Sue Hills       George Hunt, Jr
Dan Kimura                Seth Macinko    Terry Quinn
Al Tyler

Elections of SSC Officers

Rich Marasco and Jack Tagart were reelected by acclamation as chair and vice chair, respectively.

C-1  HALIBUT CHARTER IFQ FINAL REVIEW

Darrell Brannan and Maria Tsu (NPFMC) presented and responded to questions about the public review draft of the Halibut Charter IFQ EA/RIR analysis. Public testimony was provided by Jim Richardson and Dale Bondurant (Alaska Constitutional Legal Defense Conservation Fund). The draft EA/RIR addresses many of the concerns raised in the February SSC minutes, as well as revisions and clarifications requested by the Advisory Panel and Council. The EA/RIR and accompanying appendices present a great deal of useful information regarding the proposed charter IFQ and community set-aside programs and form a reasonable basis for decision making. The SSC wishes to emphasize the following points:

1. It is important to emphasize that the halibut charter-GHL amendment emerged as a measure to stabilize the allocation of halibut between the commercial fishery and an important component of the recreational fishery. The December 1999 SSC minutes on the GHL amendment note that:

   “Finally, the SSC would be negligent if it failed to warn the Council that the preponderance of evidence from fisheries in the North Pacific and other regions suggests that allocations between user groups are unlikely to be definitively settled by any single allocation decision. Instead, these allocation battles are reopened whenever a set of stakeholders believes that their negotiating position has improved. As noted in our previous minutes, IFQs are a mechanism that would shift this burdensome reallocation battle out of the Council chambers and into the marketplace.”

That is, we suggested the consideration of a halibut charter-IFQ program as an alternative to the GHL, one that could relegate some allocation decisions to the voluntary operation of market transactions. In addition, it is anticipated that charter operations will be more profitable in the long run under an IFQ than under a binding GHL.

2. Discussions of the potential need for halibut to support the community set-aside program neglect to elaborate on the varied character of charter type operations in remote communities. For example, luxury lodges, fulltime halibut charter business, mixed service business (e.g., halibut/salmon charter, bird/marine mammal sightseeing, kayaker/camper/hunter drop-off services) have quite different needs. Because the break-even analysis did not explore the full suite of these varied operations, the model results may not provide an accurate indication of the actual number or operation mode of businesses that would develop under the community set-aside program.
3. It is uncertain whether the net benefits of a community set-aside program to the beneficiary communities are larger or smaller than the losses to other quota share recipients.

4. While the EA/RIR includes a discussion of the effect of the community set-aside program on the profitability of commercial halibut fishing, the impacts are not quantified and may differ across vessel classes, regions, and between initial quota share recipients and subsequent purchasers.

5. The EA/RIR includes Appendix 5; a new addition contributed by Dr. James Wilen. The analysis in Appendix 5 is contingent on the assumptions that the charter fishery can be characterized as exhibiting perfect competition, that charter operators can reduce their operating costs under an IFQ program, and that there is no opportunity cost to holding quota shares.

The SSC notes that because the halibut charter fishery has not been constrained by an overall catch limit, it does not seem likely that charter operators will have adopted cost increasing race-for-fish practices. Moreover there are few barriers to the number of vessels that can be owned and operated by individual firms. Consequently it seems unlikely that there will be substantial opportunities for cost savings under an IFQ relative to the present. In contrast, under a binding GHL and without implementation of an IFQ program, there will be incentives to adopt inefficient technologies.

The SSC agrees that the price of taking a halibut charter trip is determined by the demand for sportfishing trips and by the marginal costs of providing those trips if the number of trips is not constrained. However, in the absence of cost reductions or in the face of excess demand for charter trips, the argument for an increase in the average price of a charter trip is stronger than the argument for an unchanged or decreased price as suggested in Appendix 5.

6. The SSC does not believe that it is likely that a halibut charter-IFQ would provide significant stock conservation incentives.

7. During staff presentation and subsequent SSC discussion, several questions arose about differences in Alaskan resident and nonresident demand for halibut sportfishing. The following figures are drawn from a recent study of Cook Inlet region halibut sport fisheries (Herrmann et al. 2001)¹ and are offered as an Appendix to the SSC minutes on this agenda item.

Appendix to SSC comments on halibut charter IFQ EA/RIR

The likelihood that a typical angler will take a halibut sportfishing trip depends on trip attributes (expected catch, trip price, etc) and individual demographic characteristics (residency, income, gender, etc.). Herrmann et al. (2001) reports on a statistical relationship that shows a declining marginal utility of catch and that Alaskans are more sensitive than nonresidents to changes in expected catch.

C-1 APPENDIX

FIGURE 1
Change in Participation of Alaska Residents and Non-Residents

Herrmann et al. 2001.

Reductions in expected catch reduce the net benefits to anglers in two ways. First, the marginal sport fisher will drop out of the fishery as the expected catch decreases (Figure 1), thereby decreasing the total net benefits of the fishery (Figure 2).

Second, the net benefit of taking a trip is also reduced for all the sport fishers who continue to participate because the trip produces less net benefit when the catch rate declines. The total net benefits that accrue to Alaskan anglers are more responsive to changes in expected catch than are those obtained by nonresidents. (Figure 2).

FIGURE 2
Change in Angler Net Benefits of Alaska Residents and Non-Residents

Herrmann et al. 2001.
Angler net benefits are also affected by changes in trip costs. Increased trip costs might arise as a result of increased license fees or as an unintended consequence of management actions taken to limit charter-based halibut sportfishing catches. The number of angler days fished by Alaskans is more sensitive to trip cost increases than is the number of angler days fished by nonresidents (Figure 3). So, if the cost of taking a charter trip increased as a result of management actions, there would be a larger reduction in trips taken by Alaskans than in trips taken by nonresidents.

**FIGURE 3**

Change in Participation of Alaska Residents and Non-Residents

![Graph showing change in angler-days fished by Alaskans and nonresidents with change in trip cost.](image)

Herrmann et al. 2001.

**C-2 (b) RPA COMMITTEE REPORT**

The SSC received a presentation from RPA committee chair, Larry Cotter. Additional clarification was added by Doug DeMaster. The RPA report the SSC received addressed the first task of the RPA committees, i.e., to propose regulations for the last six months of 2001. The second task, to propose regulations and an experimental design for 2002 and beyond, was not addressed. The SSC normally comments on the scientific data and analysis brought to bear on an issue. In this case, no analysis was presented; therefore the SSC cannot comment on the science. The opinions, questions and concerns expressed below are based on the general background of SSC members.

The SSC noted that telemetry data were included in the rationale sections of the proposal, and that a large proportion of the telemetry locations are within 10 nmi. The SSC had several questions on the interpretation of those data. Mr. Cotter indicated that the RPA Committee also requested additional information on the telemetry data and its interpretation and possible biases. A white paper is being prepared by NMML and ADFG staff for presentation to the Committee.

From the presentation, an apparent issue is opening the SCA outside of 10 nmi to pollock fishing in one season (rather than two) for the rest of the year. The SSC notes that the proposal does not affect the total removal of pollock, thus the question is one of regional impact of increased fishing effort outside of 10 nmi in BiOp Areas 7 and 8.

The implementation of the AFA has resulted in fewer boats and a BS pollock fishery that extends over a longer time period. The AFA changes are recent and few data exist to allow speculation on the extent to which the proposal would concentrate fishing removals in the SCA and any effects of that concentration.
The SSC notes that the pollock stock is very strong but it would be useful to see summer biomass distribution in the area to assess the probable exploitation rate relative to available biomass. If the result of the RPA committee’s proposal is that less fishing takes place during summer in Areas 7 and 8, then chum salmon bycatch is likely to be lower than under the ER.

The SSC noted that the proposal offers more protection than the emergency rule in the GOA and the Aleutians, areas with steep declines in SSL numbers. The areas with relaxed protection are those with increasing SSL trends during the 1990s. The proposal is limited to six months. Thus the SSC finds that it is not possible to conclude that the effect of the entire proposal would be less protection for SSL than under the ER, but cautions that this is the opinion of the SSC and is not based on a carefully reviewed analysis.

C-2(d) SSC REVIEW OF NMFS NOVEMBER 30, BIOLOGICAL OPINION

In December 2000, the NPFMC requested that the SSC review and comment on the NMFS November 30, 2000 Biological Opinion. In February, 2001, the SSC completed a draft report. Since then, SSC members have worked to revise the draft document. During this Council meeting, the SSC devoted a substantial effort to completing those edits. The SSC will distribute the revised draft report to all members for final review, after which the final report will be submitted to the Council.

C-3 DRAFT PROGRAMMATIC SEIS

The SSC received an informational update from Mr. Steve Davis concerning status of the Draft Programmatic Alaska Groundfish Fisheries SEIS. Mr. Steve Davis met Dr. Rich Marasco (SSC Chair) and developed a memo outlining what would be the best use of SSC time in reviewing the draft SEIS. The SSC thanks Steve Davis for providing this memo. In particular, this memo asked the SSC to focus on:

Does the SSC agree that the range of “hypothetical actions intended to provide the necessary information to allow for meaningful analysis and identification of environmental consequences” provide a valid approach for conducting a Programmatic SEIS? Can the SSC suggest alternative methods?

The SSC was asked specifically to review Chapter IV, Environmental and Economic Consequences (.. of different management policy frameworks).

The SSC noted that time constraints and the enormous size of the Draft Programmatic SEIS precluded the SSC from performing a review of even these limited portions of the document in time for the June Council meeting. However, the SSC expressed a willingness to provide whatever assistance it could.

The SSC assigned portions of the draft SEIS to members for review, and during the June Council meeting, will evaluate the progress that had been made.

DIGITAL OBSERVER PROJECT

The SSC was intrigued by the presentation of a digitizing video system that identified fish by image analysis and then kept track of the numbers of fish by species and size. The presentation was made by Mr. Mark Buckley, Project manager and Dr. Eric Rogers, Chief System Engineer, Digital Observer LLC. SSC members concluded that the system has a clear potential for collecting catch data on longline vessels, either on small vessels that do not carry an observer, or on larger vessels substituting for an observer. Longliners are the targets sector because they bring fish on-board one at a time at a focused location on the vessel. The latitude and longitude are recorded automatically on the video by GPS, while date and time are caught by digital clock. The data are stored on a small computer that is part of the system. The SSC encourages innovation in developing observer coverage technologies.